

Listening and Speaking Online

Dennie Hoopingarner
Language Learning Center Michigan State University

Abstract:

This paper discusses a new computer application that provides an environment for speaking and listening in an online setting. The paper also discusses the theoretical basis for the importance of speaking for language acquisition, and finally describes a sample curricular unit for using the technology via task-based language teaching.

這份報告將展示一項新網路科技的應用，此應用使透過網路的線上聽說學習來教學的環境得以實現。報告包含：語言學習過程中「說」的重要性，此科技應用的展示，目前在美國語言課上的應用。

Key words: e-learning, distance learning tools

關鍵字：數位學習教材，遠距教授數位學習工具

The proposition that speaking is necessary for language acquisition is relatively new. Newer still is the technical ability to integrate speaking into online language learning environments. This paper will show that in spite of theoretical and technical hurdles in the past, online language teaching and learning should be seen as neither difficult nor optional.

Audio was not a part of the earliest computer-assisted language learning programs. CALL emerged from the computer-aided instruction era of the 1960s (Saettler 1990, McDonald et al 2005), a time when computing hardware did not support multimedia in any form. A paradigm of text-based computer work emerged, and remained the dominant paradigm of CALL for decades. Even after the technology had evolved to a point where audio input was possible, the paradigm of behaviorist language teaching did not see multimedia as a priority, or even as a benefit. Separate from technological hurdles, speaking would not be seen as a priority for language learning on theoretical grounds.

Krashen's (1981, 1985) theory of language acquisition has proven to be both influential and controversial. The significance of the theory for speaking lies in the theory's claim that input was both necessary and sufficient for language acquisition. Krashen (1981) claims that "speaking is not necessary" (p. 128), that learners acquire language solely through input.

This claim was tested by a study described by Palmer (1992). A university introductory language program was designed based on the Krashen's hypotheses. Students were not expected to produce any language. Materials consisted of input that was designed to be optimally comprehensible to learners. At the end of the course, student achievement and proficiency were compared to that of students who learned in conventional courses. The results were not supportive of Krashen's claims. The proficiency of students who learned with the experimental approach was substantially inferior to that of students who learned in conventional classes. This study strongly suggests that language learning requires more than just comprehensible input.

Swain (1985) tested Krashen's hypotheses in a different way. She studied students who were in a language immersion setting in Canada. These students were in an environment that was rich in second-language input. They were hearing and reading the second language constantly on a

daily basis. Swain found that the listening and reading comprehension abilities of these students was quite good, but their ability to manipulate the grammatical structure of their second language was significantly inferior to their comprehension ability. Similar to Palmer's study, Swain's findings suggest that input alone is not enough for acquisition to take place.

Swain (1985, 1993) theorizes that there is a difference between language comprehension and production, and the two skills are separable. This theory is contrary to Krashen's theory. Krashen claimed that listening skills would automatically apply to speaking skills. Swain hypothesizes that it's possible to have excellent listening comprehension, but poor speaking skills.

There is a cognitive basis for this view of language. Fodor (1983) presents a modular model of the brain. In Fodor's model, cognitive skills such as vision, memory, spatial awareness, etc. function in the cognitive system independently from each other. Gregg (1996) argues that there is reason to see the various aspects of language, such as pronunciation, lexicon, grammar, etc. in the same way. Gregg claims that acquisition or strength of one aspect of language does not automatically transfer to other aspects.

In the case of the immersion students in Swain's study, Swain claims that comprehending and producing language are separate processing tasks. When listening or reading, learners can focus on the meaning of the input, and use the structure only in order to recover the meaning. When speaking or writing, however, speakers must draw on the formal structure of the language in order to produce language that is well-formed.

Swain refined Krashen's hypotheses to reflect the modularity of the language skills. The new hypothesis states that only the skill that is practiced will improve. Sufficient comprehensible input will improve comprehension, in other words, but comprehensible input will not improve production ability. In order to improve speaking ability, learners must produce spoken output. This is the essence of her Comprehensible Output Hypothesis.

The implication of these studies for language programs is clear. If it is desirable for students to be able to speak, then speaking instruction and practice is a necessary component of language programs. Students need to produce language in order to improve their speaking ability.

There is no clear understanding of how much speaking is necessary, but there are indirect indications that the amount of speaking practice that language learners currently engage in is insufficient. One indication is that the end state of language learning is largely below the desired level (Falsgraf 2007). Falsgraf notes that the expectations of language programs in the US are low, and points to the time spent in learning languages as a factor.

Classroom research conducted by Flanders (1970) supports the claim that time is a factor. Flanders' extensive study of in-class behavior presents an informative picture of teacher and student participation in classroom activities. Of the 70% of class time in which there was any talking at all, 70% of the speaking was by instructors, leaving only 30% of the 70% of speaking time, or 21% of class time that students speak. Translated to real time, four years of 15-week semesters and 60-minute class periods meeting 5 days per week amounts to 600 hours of classroom instruction time. If the 21% of speaking time were divided equally among 25 students per class, that gives each student a mere 5.04 hours of speaking time in class over four years of language instruction.

The grim truth is that conventional language instruction is not an environment that provides much time for speaking practice. Long and Porter (1985) indicate that using models such as Task-Based Language Teaching can improve the situation because it increases speaking time in the classroom, but also point out that the increase is probably not sufficient.

Classroom language learning is thus in an unfortunate situation. It is necessary for learners

to speak, but in the course of classroom language learning, learners have very little time to speak. They don't get enough of what they need.

Homework is one obvious method to provide more speaking practice. Until recently, the only method of speaking homework available to instructors involved students recording themselves using cassette tapes and handing in the tapes to their instructors. Although still possible to do, dealing with cassette tapes is cumbersome and problematic for teachers and students.

When computers became widely available, and networks connected computers together, another option became possible. Using simple software, students can create digital audio recordings on their computers. The problem that arose thereafter was finding a practical way to get the recordings to the teachers. There were only two options for doing so. One way was to attach the recording to an email message to the instructor. The primary problem with that solution stemmed from the large size of audio files. The files were so large that it took time to transmit the email, and once delivered to the instructor's email account, the files often exceeded the limitation of instructor's mail account. In addition, the large number of emails from many students in no particular order in the instructor's inbox were unorganized and hard to manage. Teachers had to spend time to sort the audio files.

The other option was for the students to use FTP to upload their sound files to a server. Again, there were technical and practical problems with this method. The software and method of transferring files is new and confusing for many students. Instructors had to set up a server, and give the login information to students. There was a danger of students inadvertently overwriting other students' files.

These solutions, simple in concept, were complex and confusing to students, and teachers had to spend time both in training students to use the technology, and to sort out the audio files after they were transferred. What was supposed to be an improvement in the process of speaking practice was in fact an additional burden on both students and teachers.

Web-based solutions were not yet possible. Although audio delivery through the web emerged very early in the evolution of the web, it was one-way only. Language learners could listen, but not produce. The technical barrier to accepting audio input through the web is structural in nature. The web uses a client-server model, under which data is pushed from a central server to individual clients. Data flows in one direction only. It is technically impossible to input data into a web browser.

Additionally, web browsers can only process text and still images. Any other content, such as audio, must be passed to a separate program to process. If a given computer does not have the proper software to handle the data, then it can not be displayed on that computer. For many years, online language learning activities could not include speaking. This presented a severe problem for institutions that wanted to move to online language learning.

A solution to this problem came in the form of plugins. Plugins are programs that run inside of a web browser, and provide functionality that web browsers can not. One plugin, called Flash, is installed on a large number of computers, and provides two-way audio.

An effective use of the technology would follow effective language pedagogy. One teaching methodology that is emerging from second-language acquisition research is Task-Based Language Teaching. This method focuses on a task, not a piece of language, as the content of the language lesson. Learners must draw upon, and extend, their language proficiency in order to complete the task. A framework developed by Nunan (2004) can be used to develop tasks that maximize student output in a language lesson.

Nunan's approach for developing activities begins with identifying a need for using language in a real-world context. Thus, the focus of the lesson is a particular use of language in a particular authentic situation. This approach contrasts from lessons that are built around a particular grammar point.

What follows is one example unit designed from Nunan's procedure. The real -world task is leaving a voice mail message. Pedagogical tasks were created to focus on the overall task, and certain language skills that are necessary to complete the task are also included as sub -tasks.

Task-based lesson

Real-world task: Leaving a voicemail

Step 1: Schema Building

1. Ask students: What is voice mail? Why do you use voice mail?
2. Play samples of voice mails.
3. Identify elements of voice mails: caller identifying self, stating purpose of call, the message, instructions or requests of the caller.
4. Focus on the "text," which is the content and meaning of the message, not on the structure.

Step 2: Controlled Practice

Record yourself leaving this message:

"Hi, Pat. This is Chris. I'm calling to let you know that Terry and I are meeting for coffee at Starbucks. We're planning to meet there at 5:00 o'clock. If you're free, why don't you stop by? Hope to see you then. Bye."

Step 3: Authentic Practice

1. Record yourself leaving a message with this information:
Call your boss, tell him you have a doctor's appointment, so you'll be late for work today.
2. Fill in the blanks and record yourself leaving this message
Hi, Mom. This is _____. Dad and I are at the _____, so when you get this message, please _____. Thanks!

Step 4: Focus on Linguistic Elements

1. Pronunciation of question intonation. Record yourself reading these questions:
Are you free tonight?
Did you get the last message I left for you?
Do you want to get together?
2. Wrapping it up. Use these forms to end a message.
"So, call me back."
"Anyway, ..."
"OK, so ..."

Step 5: Provide freer practice

Write a situation for a message similar to the one you recorded in Step 3. Exchange yours with a partner, and record each other's messages.

Step 6: Introduce the Pedagogical Task

Leave these voice mail messages for your instructor:

1. Your pet dog is sick. Call your vet and ask him what to do.
2. Call the auto repair shop and ask if your car has been fixed.

This sequence of tasks is both pedagogically sound, and takes advantage of the online recording function. Students' recordings can be saved, so the instructor can monitor student work. Task-based language teaching combined with an online speaking tool offers a model for incorporating speaking into the language curriculum in an effective way.

References:

- Falsgraf, Carl. 2007. "Innovations in Language Learning: The Oregon Flagship Model." *Journal of the National Council of Less Commonly Taught Languages* 4, pp 1 - 16.
- Flanders, Ned. 1970. *Analyzing Teaching Behaviour*. Reading, MA: Addison Wesley.
- Fodor, Jerry. 1983. *The modularity of mind: an essay on faculty psychology*. Cambridge, Mass.: MIT Press.
- Gass, Susan. 1997. *Input, Interaction and the Second Language Learner*. Mahwah, NJ: Lawrence Erlbaum.
- Gregg, Kevin. 1996. "The logical and developmental problems of SLA" in W. C. Ritchie and T. K. Bhatia, eds. *The handbook of second language acquisition*. San Diego: Academic Press. pp. 49-81.
- Krashen, Stephen. 1981. *Second language acquisition and second language learning*. Oxford: Oxford University Press.
- Krashen, Stephen. 1985. *The input hypothesis: issues and implications*. New York: Longman.
- Long, Michael H. and P. Porter, 1985. "Groupwork, Interlanguage Talk and Second Language Acquisition." *TESOL Quarterly* 19/2:207-227.
- McDonald, Jason, Stephen C. Yanchar and Russel T. Oguthorpe. 2005. "Learning from Programmed Instruction." *Educational Technology Research and Development* 5, 2, pp 84-98.
- Nunan, David. 2004. *Task-Based Language Teaching*. Cambridge: Cambridge University Press.
- Palmer, Adrian. 1992. "Issues in evaluating input-based language-teaching programs." in Alderson, J. Charles and Alan Beretta (eds) *Evaluating Second Language Education*. Cambridge: Cambridge University Press.

Saettler, Paul. 1990. *The Evolution of American Educational Technology* . Engelwood, CO: Libraries Unlimited.

Swain, Merrill. 1985. "Communicative Competence: some roles of comprehensible input and comprehensible output in its development." in Gass, Susan and Madden, Carolyn (ed). *Input in Second Language Acquisition* . Rowley, MA: Newbury House

Swain, Merrill. 1993. "The output hypothesis: Just speaking and writing aren't enough." *The Canadian Modern Language Review* , 50(1), 158-164.